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# Tracking the mystery of cosmic rays

*High schools, academics team up in one of 25 projects receiving \$8.3 million from province*

By Phoebe Dey

Times have changed from when science projects were as simple as adding baking soda to a fake volcano and watching it erupt. Thanks to an innovative project based at the University of Alberta, high school students around the province are helping to solve the greatest mystery of modern astronomy: the cosmic ray.

"This will give us clues to the highest energy phenomenon in the universe," said Dr. James Pinfold, project leader and director of the U of A's Centre for Subatomic Research.

ALTA: Alberta Large-area Time-coincidence Array has been in the works for more than three years, but it has finally come to fruition. The project, run by physicists at the Centre for Subatomic Research, enlists high school students to study the cosmic bursts in hopes of discovering clues about the origins and structure of the universe. Dr. John McDonald and Dr. Wytze Brouwer are also key players in the project.

Currently, five detector systems have been deployed on school roofs in Alberta, and by the project's end, as many as 30 schools will be able to participate, said Pinfold. The detectors will cover as many as 100,000 sq-kms, making it one of the largest detection fields in the world.

With the recent announcement of \$300,000 in funding from the province's Innovation and Science Research Investments Program (ISRIP), the group was able to add more than 10 additional detectors to its inventory. ALTA was just one of 25 U of A projects receiving a total of \$8.3 million in funding from ISRIP. Others include new facilities for surface mining research, a bioreactor and biodigester for converting agricultural and municipal waste into fuel and a nuclear magnetic

"This will give us  
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— Dr. James Pinfold



Dr. James Pinfold (top right) inspecting a cosmic ray detector with research team from Holy Trinity Catholic High School: Steve Ramage and Lisa Coo (standing), Physics 30 teacher Brent McDonough, Ekua Yorke and Chad Nedohin (front row).

resonance facility to probe the most basic building blocks of molecules.

ALTA will also receive \$30,000 worth of detectors from CERN, the European Organization for Nuclear Research, where Pinfold is the Alberta group leader of a major experiment. Other funding sources include Imperial Oil, U of A, BICRON Inc., the Engineering Institute of Canada and participating high schools.

Although 200 low-energy cosmic ray particles strike every square metre of the Earth every second, the real mystery surrounds the much rarer ultra-high-energy particles. Pinfold said the huge span of the detection field gives them a better

chance of picking up those high energies. He's also excited about the rare aspect of collaboration between high school students and the university.

"We think this is a unique experience for high school students to get involved in cutting-edge research," he said, adding the students may appear as co-authors in scientific journals. "We're hoping this will excite them so they'll go on in life to be scientists and thinkers."

The mission isn't only exciting for high school students, but for their teachers as well. When Vlad Pasek, department head of science at Archbishop O'Leary Catholic High School, attended his first ALTA

meeting three years ago, he convinced his administration to become involved.

"I knew the kids would love it and that it would make everyday teaching more exciting," said Pasek, who, along with his students, spent about one year calibrating the equipment before it was operational.

"When you've been teaching a long time you need projects to make it interesting, and this was a big one."

The Physics 30 teacher is now leading his second group through the curriculum on cosmic rays, and students collect data daily from the machines in

the classrooms connected to the rooftop detectors. "We spent the first year setting everything up, but now it's going to be more exciting because we're getting actual data," said Pasek, adding he may video-conference with students at other schools who have signed on with ALTA. "It's great for these kids to be involved with an actual experiment that is done at university. Not many students have that chance."

Not only is the project being lauded locally, but it has also garnered international attention. Researchers across North America have already followed the U of A's lead, and universities in Hong Kong and Portugal have inquired about the detector systems, said Pinfold. "We are recognized to be leaders in this project," he said. "We've had many enthusiastic teachers and students involved, and now it would be nice to get those detectors out there to get this singing and humming."

The program is expected to last as long as 10 years. ■

Richard Siemens

— Physics 30 teacher  
Vlad Pasek



# Provincial spending spree for health, high-tech research

*Understanding e-coli proteins one of several multi-million-dollar projects underway*

By Ryan Smith and Phoebe Dey

Asked how long he's been working in the field of proteomics, Michael James laughs. "Not very long," he says. "It's a brand new field and nobody's been doing it for very long."

But the field is getting significant support. On Feb. 7, James learned his Project CyberCell had earned a share of \$2 million in new funding going to the Genome Prairie Project.

"What we hope to do is map all the structures of the approximately 4,000 E. coli proteins and then simulate them on a computer," said James, who leads the project along with fellow U of A biochemist Mike Ellison.

"That's the 'cyber' part of Project CyberCell."

James said once the E. coli proteins are "defined" and the information stored on computer, the researchers can digitally introduce a new molecule—an antibiotic, for example—into the computer version of the E. coli cell and see how the two would interact in reality. "That's just one of many things we could do," James said. "But you have to remember, this will be a huge, gargantuan project involving maybe 50 researchers all across the country, and it'll take a long time to achieve—we're talking maybe 20 years."



Dr. Michael James (left) with members of his laboratory group.

Project CyberCell is one of four projects across the province to receive multi-million-dollar funding from the province. The other projects include \$6 million—added to \$4 million last year—for the Alberta Network for Proteomics Innovation, \$5 million to support equipment needs related to the Canada Research Chairs program, and \$3.1 million for the Alberta Synchrotron Institute. The latter will ensure access for Alberta researchers to Canada's first synchrotron—an imaging machine that uses strong magnets and beamline workstation technology to pro-

duce light that is 1,000 times more powerful than conventional X-ray machines.

## \$5 MILLION BOOST FOR HEALTH RESEARCH

The province also announced a \$5-million grant this week for the planning and design of a new health research centre at the University of Alberta. "Today's announcement brings relief to us, that we are getting some research space to help in our recruitment effort," said Dr. Lorne Tyrrell, dean of the U of A's Faculty of Medicine and Dentistry. "It's been 20 years since we

had new buildings—we've filled the others, so there is no more room."

The province is committing \$5 million each to the University of Alberta and the University of Calgary to assist with planning and development of two new Health Research Innovation Centres.

"Between the University of Alberta and the University of Calgary, the two universities attracted \$125 million in research funding last year," said Innovation and Science Minister Lorne Taylor. "Across the country, the U of A is ranked first (for health research funding), while the U of C is ranked third. That says something about the quality of research that is done in Alberta."

A new facility will eventually have an impact on the people of Alberta, said U of A President Rod Fraser. "We are expecting to deliver to Albertans breakthroughs we celebrated last year, such as the Edmonton Protocol in islet transplants for diabetics," he said.

The university is planning construction of the 500,000-sq.-ft. Health Research Innovation Centre at each end of the existing Heritage Medical Research Centre on 87th Avenue. The estimated cost of the centre is \$140 million. The provincial investment is expected to leverage funding from the federal government through the Canada Foundation for Innovation, the Alberta Heritage Foundation for Medical Research and private partners. ■

## folio

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## ...and in other grant news

*Study aims to improve communication between courts and public*

By Ryan Smith

A civil justice research team based at the U of A is celebrating news of a \$600,000 grant from the Social Sciences and Humanities Research Council of Canada (SSHRC).

With the co-operation of more than 15 legal institutions across the country, Diana Lowe, executive director of the U of A-housed Canadian Forum on Civil Justice, will join U of A research directors June Ross, Allison McKinnon, and Lois Gander in trying to improve communication between the courts and the public. Lowe hopes this innovative research will improve the operation of the civil justice system and public access to it.

"Canada already has one of the best, if not the best, justice system in the world," Lowe said. "It's a reflection on how good it is that we've managed to pull together all the institutions and organizations that have agreed to work with us in our study to try to improve it even more."

For the study,

Lowe said, "We'll focus on the civil justice system, which is different from the criminal system. Civil justice includes family law, small claims and personal injury law—the types of cases that bring most people to the courts."

Frustration with the system "boils down to three things: costs, delays, and not knowing how the civil justice system works," Lowe added. "Through our research and implementation of new initiatives in the system, we hope to improve the system so the public is better educated and prepared and can

"It's exciting—we have  
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—Diana Lowe



Diana Lowe, executive director of the U of A-housed Canadian Forum on Civil Justice.

be involved in the ongoing process of civil justice reform.

"It's exciting—we have all the players involved now, from lawyers to government institutions, and we hope this collaborative research will make real changes. We'll begin by interviewing judges, court administrators, lawyers, legal aid workers and other people within the system, then we'll consult members of the public who've been involved in civil justice cases. From there we'll identify best practices and implement demonstration projects in the courts, which we will evaluate to measure improvements.

"When we're into our third year of the study it will be a matter of evaluating our findings and working with our partners from across the country to report and prepare written materials and maybe videos, then disseminate the information to the players within the system, the media and the public," Lowe said.

The grant was one of 15 announced Feb. 5 as part of SSHRC's Community-University Research Alliances program. ■

## laurels

### AWARD OF MERIT

Dr. Eugene Krupa, distributed learning coordinator, Centre for Health Promotion Studies, was recently honored by the Public Health Association of British Columbia with an Award of Merit to recognize his community leadership. Krupa contributed to the success of the CATCH (Community Action Towards Children's Health) initiative in the Kelowna, British Columbia region. Under his leadership, this intersectoral coalition was assembled and continues to support health outcomes for children and youth in the region. The Award of Merit is given to a community member who has contributed significantly to enhancing the health of the community in which he or she lives.

## Corrections

In a feature introducing new faculty members to the campus community in the Jan. 26 issue of Folio, Dr. Bart Hazes was listed in the wrong department. He is a member of the Department of Medical Microbiology and Immunology.

We also incorrectly reported that the U of A's School of Business tied for third overall in Canada in the *Financial Times of London's* annual ranking of the world's business schools. The school tied for third in the research category only.

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# Escape to reality

*Is it just a cheap thrill, or can the latest television craze shed any light at all on the nature of human behaviour?*

By Gilbert A. Bouchard

There was a time when you watched TV to escape reality. No more. The current television season has been inundated with staged, "reality-based" offerings meant to recycle lived veracity back to our living rooms in various formats.

Spawned almost a decade ago by the unholy marriage of in-your-face talk shows and the sexy artifice of MTV's persistent *The Real World*, the offspring are coming ever fast and furious from the buff castaways on *Survivor I and II*, the hapless roommates in *Big Brother*, the vacillating and randy love-birds on *Temptation Island*, the hidden back-biter on *The Mole* to Canada's way-less-glitzzy *Pioneer Quest*.

Not only are there a lot of these shows; this questionable trend is being rewarded by record audiences. A recent episode of CBS/Global's *Survivor* pulled in an amazing 2.5 million viewers in Canada alone—out-performing many a hockey playoff game. Impressive numbers, yet a success that has many a media commentator asking some difficult questions about the underlying reasons for the popularity of this trend.

For starters, reality television isn't really about reality—or at least not reality as most of us would see the concept. "Realism is the most misused word in the lexicon of film," explains Dr. William Beard, University of Alberta professor of film and media studies. "Video realism is a store security camera—yet nobody wants to watch that."

What "reality" television offers instead, says Beard, is a carefully constructed and sophisticated illusion of reality with all the boring bits edited out. In fact, one could note that the more "real" a series is (recall *Big Brother*'s deadly boring live web-casts of housemates washing dishes and doing jigsaw puzzles), the less successful it's been in the ratings.

In the case of *Survivor*, the production of that finished slick product entails a major production including numerous camera crews, sensitive boom mikes and complex lighting equipment—all the apparatus of filmmaking.

"In the end, every attempt is made to make it look like a movie," notes Beard with some irony, given the documentary pretension of the reality movement (going against the grain of journalistic/documentary television as do Global or A-Channel who revel in the post-modern habit of foregrounding production equipment).

Yet this cinematic affectation just underlines how "old-fashioned" reality television is, says Beard—down to the "Captain Cook-era anthropology," artificial sets, costume jewelry and strong fictional element.

"Now that they have a sequel to *Survivor*, you can see just how much they are trying to recreate the first one as exactly as possible—what could be less real than that? But people don't want

natural; natural is what we want to get away from when we watch TV." What reality-based shows do instead is wrap deeply comfortable myths and significant fictional tropes in a shell of veracity—giving us our metaphoric cake and allowing us to eat it too.

Dr. Aniko Bodroghkozy, professor of comparative literature, film and media studies and author of the recently released *Groove Tube: 60s Television and the Youth Rebellion*, says she's been having loads of fun trying to figure out who's going to be "the next Richard or Sue (popular participants in the first *Survivor*)" in *Survivor II*. This pastime just reinforces in her mind the predictable "sitcom casting types the show utilizes—the crusty old man, the devious guy, the blonde bombshell—all the simple, easy-to-decode melodramatic characters."

In fact *Survivor II: The Field Guide* (the show's official companion book), written by producer Mark Burnett, outlines 16 different types (or "strategies") including "the entertainer, the leader, the flirt, the underdog, the professor, the zealot, the mom, the athlete, the wild and

crazy guy/girl, the quiet one, everybody's friend, the feral child, the introvert, the redneck, the slacker and the snake."

The highly contrived form and type-casting give the viewer a high degree of familiarity, easy enjoyment and easy communal water-cooler discussion the next day, Bodroghkozy explains, just as soap operas used to do in the past—provide a context for people to get together and gossip where they won't offend anybody or step on toes.

"*Survivor*, like all successful television,

is polythematic, an open text that allows different readings. People can use the show as a launching pad to think about and discuss the workplace, capitalism and relationships in 21st century."

Yet, while reality-based TV might be a good semiotic tool, it has very limited usefulness on a psychological level, despite *Survivor*'s own propaganda boasting that "psychology is the very essence of the game." According to psychologist Dr. John Paterson, associate dean of education, "there are no really great insights in human behaviour to be found on these shows...It's too highly manipulated and edited for that—it's just entertainment that strikes a chord with audiences because you have real people, not actors."

While it was certainly tempting to view the first series as a horse race and try to predict who'd get kicked off the island next, watching the second *Survivor* is a far different experience, knowing what we do about the first. "We found out afterwards that Sue (one of the first *Survivor* villains and an example of the "redneck" type) was quite nice and not always so harsh," says Paterson.

Dr. Peter Swirski, professor of comparative literature, says trying to figure out human behaviour from a show like *Survivor* is like trying to figure out the behaviour of bulls from footage of bulls taken at a bull fight, where you don't see

the matador and his agitations. For Swirski, reality-based television reflects the underlying anxiety people in the Western world feel and the lack of meaning they feel their lives hold.

"There's a tremendous vacuum in our lives, an existential crisis where so many

people live very boring lives that don't have a touch of reality—that's why we desperately seek that touch of reality, be it reality TV, collectibles, or people getting plastic surgery to look like celebrities."

In effect, viewers turn to reality-based TV to validate their experience, their very lives, he continues, the same way sports fans "will work so hard to get their faces on TV, so they can yell hello to their mothers—even if they haven't called their own mothers in weeks or have no real desire to do so."

In the end, Swirski finds the reality-based TV trend disturbing and is frightened that conflicts will escalate and that "real blows will be exchanged and real injuries happen" on these programs—much in the same way the Jenny Jones talk show was implicated with the murder of one guest by another.

"What kind of society, what kind of people need to go and exhibit themselves in the most repulsive way to get their 15 minutes of fame?" ■

"There's a tremendous vacuum in our lives, an existential crisis where so many people live very boring lives that don't have a touch of reality."

—Dr. Peter Swirski



# International Week

## Lewis flays globalization

***Calls pharmaceutical conglomerates "callous, obscene and abominable"***

By Ryan Smith

Stephen Lewis challenged a capacity crowd at the Myer Horowitz Theatre "not to fall for the hoax of globalization." Delivered with passion to an audience that responded with a standing ovation, Lewis' speech Jan. 29 launched the University of Alberta's International Week 2001.

Lewis, a leading Ontario New Democrat Party politician in the '60s and '70s, former Canadian United Nations ambassador, and most recently the deputy executive director of UNICEF, said "there is something profoundly wrong with globalization... There is more to the world than creating bigger markets. We can't ignore the human dimension."

Citing poverty, the HIV/AIDS epidemic, environmental degradation, and the "digital divide," Lewis said globalization encourages the "growing entrenchment between the world's North and South."

He noted two international conferences currently taking place—the World Economic Forum in Davos, Switzerland and the World Social Forum, a conference for globalization protestors in Porto Alegre, Brazil—as examples of the bad and the good in the globalization theatre. "Davos is heartbreaking," he said of the conference that, he claimed, invites leaders of the world's financial institutions to come and praise one an-

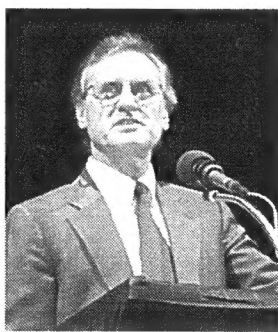
other. "But something fascinating is happening there this year."

He said the presidents of Tanzania and Mexico are among the world leaders who are criticizing globalization—the first time voices of dissent have come from people within the financial establishment.

Then Lewis praised the efforts of the "inherent protestors" at the Porto Alegre conference. "[These protestors] are labeled as flakes and anarchists," he said. "But they are the best of civil society, and they are beginning to produce a manifesto to address the problems created by globalization."

Citing reduced foreign aid from developing countries, and pointing out that 1.3 billion people in the world live on less than a dollar a day, Lewis called the current world situation "unconscionable." He also said there are ways to treat HIV/AIDS victims, but the treatments are not affordable in developing African countries where 25 million of the world's 36 million HIV/AIDS victims reside.

Calling them callous, obscene and abominable, Lewis reserved his harshest vitriol for the world's pharmaceutical con-



Stephen Lewis

glomerates. "The pharmaceutical companies could reduce the price of some of their drugs by as much as 90 per cent and still make a profit," he said. "But they don't do so out of pure, naked self-interest."

Lewis went on to predict the doom of PRSPs, the Poverty Reduction Strategy Papers implemented by the established world financial institutions in a "superficial" effort to address the rift between developing and developed countries. "Mark my words," he avowed. "By 2010 you will see the demise of PRSPs because those who maintain them don't consult the impoverished people that the papers are supposed to help."

Lewis urged audience members to join non-government organizations or travel to areas of the world that need educated helpers if they wish to be good global citizens—the theme of this year's International Week.

"This week is all about awareness and then action," Vlad Gomez, International Week programmer, said after Lewis' speech. "So please attend our events this week and help yourselves become good global citizens." ■

## Lifting the veil in Afghanistan

***Solidarity group seeks freedoms for Afghani women***

By Phoebe Day

Guided by a priority of securing women's rights and freedoms in Afghanistan, two members of a Canadian solidarity group underscored the importance of making a difference here at home during an International Week presentation.

"What motivates me is that I have the right to work, the right to an education, the right to move around freely, the right to health care," said Carolyn Reicher, from Women for Women in Afghanistan. "Afghan women have none of these freedoms. The voices of Afghan women must be heard and only when we lift the veil of silence will they be heard."

During two decades of war, Afghan women have endured extreme oppression through the denial of their basic human rights, Reicher said. More recently, under the imposed rule of the extremist Islamic Taliban regime, most women and children face severe restrictions on freedom of movement and are denied access to basic health care, education, security, and employment. When they do leave the home, women must wear a burqua, a head-to-toe covering with only a mesh opening permitting limited vision and hearing, Reicher said.

Before the Taliban came to power in 1994, women made up 50 per cent of government employees, while 40 per cent of physicians and 70 per cent of teachers were women. The number of women in these professions has since decreased significantly.

An overflowing lecture hall also heard examples of the harsh penalties exercised when Taliban laws are broken. One woman had the top of her thumb cut off for wearing nail polish, an elderly woman's leg was broken for accidentally show-



Victoria School of Performing Arts students Katarina Lakoric, Danielle Annicchiarico and Claire Hannemann display a banner supporting new freedoms for women in Afghanistan.

ing part of an ankle, and another was stoned to death for attempting to leave the country with a male who wasn't a relative.

"How can we help? Become fully aware of your own human rights," explained Janice Eisenhauer, also from Women for Women in Afghanistan. "Join a group, raise funds, write a letter. Your actions can make a difference."

An example of a local group trying to make a difference was displayed when Grade 7 students from Victoria School of Performing Arts presented Reicher and Eisenhauer with a banner decorated by classmates. The idea was spawned when Grade 7 student Claire

Hannemann read the book, *The Breadwinner* by Deborah Ellis, a story about a young girl living in Afghanistan. As Hannemann read more about the situation in Afghanistan, she shared the information with her classmates.

"The rules that they have to live by astounded everyone," said Hannemann, adding that she and four other girls painted the banner while the rest of the class made cards for the Afghani women and girls. "We all want to make a difference. I hope this will help."

The banner, signed by people attending the lecture, will be sent to a resource centre in Pakistan. ■

## Knight keeps pace tracking global issues

By Ryan Smith

For all the launches Andy Knight has managed, he may feel like more of a NASA technician than a political science professor.

But he says he's feeling fine in spite of not getting much sleep lately, particularly during International Week, Jan. 29 to Feb. 2.

At the International Centre Jan. 30, Knight presented a talk and signed copies of his new book, *A Changing United Nations: Multilateral Evolution and the Quest for Global Governance*, published by Palgrave/Macmillan press. Friday afternoon he was at the U of A Telus Centre to launch the first U of A-housed issue of *Global Governance*. The Friday event was webcast live through the *Global Governance* Web site (see url address below).

"It's been pretty hectic lately," Knight affirmed, but added his book wasn't something he had to rush to finish. "I've been working on it on and off for the past five years."

In particular, the book analyzes issues related to the United Nations and its policies and actions in an ever-changing global environment.

"At the end of the book I make some policy recommendations. They may agitate some people, but you've got to agitate people sometimes if you want to get them to act," he said, smiling.

Knight is currently working on two books with fellow U of A political science professor Tom Keating, as well as teaching a graduate seminar course and leading the U of A's model UN delegation, which is heading to New York in April. But it is his role as lead editor of *Global Governance* that draws most of his focus now.

Discussing the *Global Governance* journal, which is housed at the U of A and co-edited by Neil McFarlane of Oxford University and Thomas Weiss of City University New York, Knight said, "We've added an [opinion/editorial] section at the beginning of the journal to get people thinking critically, and Lloyd Axworthy wrote one for our first issue."

"We're really excited about the journal and the fact it's being housed in Canada at the U of A," said Jean Krasno, a Yale University professor who was at the U of A to witness the launch and speak at International Week.

Krasno is also the executive director of the Academic Council on the United Nations System (ACUNS), and she was on the committee that decided to house *Global Governance* at the U of A for the next four years, an act that U of A President Rod Fraser called "a coup" when it was announced last year.

"Andy has been very active in ACUNS, and he's an outstanding scholar, so that combined with strong support for the journal from the whole university, meant the U of A put together a terrific package for the journal, and we're really pleased with how it has worked out," Krasno added. ■

"We're really excited

about the journal

and the fact it's being

housed in Canada at

the U of A."

—Yale University  
professor Jean Krasno



## Science, the law and stem-cell research

By Timothy Caulfield

Debates about the ethical and social bounds of medical science are becoming almost commonplace. Of course, the fear that medical science is moving too fast and into areas where it doesn't belong is not new. The original heart transplant was not met with universal praise. Likewise, the announcement of Louise Brown, the first test tube baby, created a tremendous amount of ethical debate.

The current speed of scientific discovery, however, seems to generate a new controversy every week. And amid this noise we hear frequent calls for regulation. Most notably, federal Justice Minister Allan Rock has been under growing pressure to introduce the much delayed legislation on genetic and new reproductive technologies—a law which will likely prohibit a wide variety of activities, including cloning, germ-line therapy and sex selection. We need this law, it is argued, to help separate acceptable research from that which is unacceptable.

While I too believe regulation is necessary in order to address the myriad ethical, legal and social issues associated with reproductive and genetic research, we don't need the proposed criminal prohibitions. Indeed, the rapid advances we are witnessing in the medical field support arguments against, and not for, prohibitive laws. Science has a way of creating new and unique social issues while, at the same time, making old ones seem misplaced or irrelevant. Crafting enduring regulations in such a fluid environment is a tremendous challenge. But one thing seems clear; rigid prohibitions are not the answer.

### STEM-CELL RESEARCH

The recent advances which have occurred in stem-cell research stand as one of the best examples of the foolishness of inflexible prohibitive legislation. Stem-cell research demonstrates how scientific progress can invite a re-thinking of even the most controversial of research topics.

This area of research, declared by the journal *Science* as the breakthrough of

1999, holds tremendous therapeutic and scientific potential. Stem cells can be thought of as "precursor cells" which have the potential to become almost any type of tissue in the human body (a characteristic known as "pluripotency"). As such, there is hope that we will one day be able to use stem cells to create new tissue to treat diseases such as diabetes, Alzheimer's and Parkinson's and to repair damaged nerves. Some have gone so far as to suggest we may be able to use stem-cell technology to grow needed organs for transplantation.

So, what is the big controversy? While stem cells can be obtained from adults, the cells with the most scientific and therapeutic potential are derived from embryos and fetal tissue. The embryos used for this research are generally remaining from assisted reproductive procedures, such as *in vitro* fertilization. The fetal material is retrieved from terminated pregnancies. In a world where the legal and moral status of the fetus remains a hotly debated issue, it is hardly a surprise that stem-cell research should stir controversy.

Indeed, in many countries, such as Austria and Germany, research on embryos is largely prohibited. Similarly, until recently, the U.S. would not provide federal funding for research involving embryos. However, the new advances in stem-cell research have caused many countries to re-visit the issue. In France, for example, the recent scientific discoveries have prompted suggestions the government needs to revise a 1994 piece of legislation which prohibits experimentation on embryos. Even in the U.S., a country whose political system seems paralysed at the mere mention of fetal rights issues, the potential benefits associated with stems cells appear to have tipped the scales toward a more permissive approach. This fall, the U.S. changed its funding rules to allow support for research on (but not the creation of) stem-cell lines from embryos and fetuses. While future political winds may result in another shift in policy (Presi-

dent Bush hardly seems friendly to the idea of research involving embryos), the change in the U.S. position demonstrates how scientific advances can cause even well-established policies to be revised.

### CLONING EMBRYOS

The United Kingdom has gone even further than the U.S. On Jan. 23, 2001, the British government decided to allow the possible cloning of human embryos. The reason for opening the door to what was once considered to be an unthinkable scientific act? Cloned embryos have the potential to facilitate the transplantation process by allowing the creation of tissue which has the exact same genetic information as the individual needing the transplant. Some believe that this cloned material is less likely to be rejected after transplantation. Is this theoretical benefit enough to justify the possible cloning of human embryos? The United Kingdom thinks so.

In Canada, there are no formal laws that would stop embryo cloning. However, it is a practice that is currently covered by a voluntary moratorium imposed in 1995 as a result of recommendations made by the Royal Commission on New Reproductive Technologies. In addition, both the Canadian Institutes of Health Research and the Canadian Biotechnology Advisory Committee are in the process of considering the issue. More importantly, however, embryo cloning is a technology that is likely to be covered by the prohibitions in the forthcoming federal legislation. If Canada adopts a prohibitive approach, which seems likely, then revisiting this and other topics won't be easy. Indeed, had the legislation passed in 1997 (the first cut at the law, Bill C-47, died as a result of the federal election), embryo cloning would now be a criminal offence. A revisiting of the issue would have required Parliament to amend the law, a mere three years after the original legislation made its way through the system.

### PROHIBITIVE LAWS

I am not arguing that scientists should be allowed to do research in sensitive areas without any form of regulatory oversight. On the contrary, we need a comprehensive regulatory scheme that respects and addresses the public unease about technological developments but is still flexible enough to accommodate scientific progress and shifting social values. The

United Kingdom model, while not perfect, is arguably the best existing approach. In Britain, a researcher must get a licence from a national regulatory authority before he or she can proceed to work in a variety of controversial areas. Yes, the Brits also have prohibitions—for example, laws against reproductive cloning—but at least the system is flexible enough to allow a consideration of emerging areas of research.

There are some uniquely Canadian challenges to the implementation of a similar licensing scheme in Canada. For example, the provinces have constitutional jurisdiction over the field of health

care and, as such, it may be difficult for the federal government to regulate in this area unless the federal power to make criminal law is used. Nevertheless, we should not allow our constitutional framework to force the enactment of inappropriate legislation. A bad law is not necessarily better than no law.

The regulation of science almost always involves a balancing of risks against benefits. We need regulations that allow that balancing act to continue. Are there scientific activities that warrant criminal prohibitions? Probably. However, as highlighted by the advances in stem-cell research, technologies appearing to warrant criminal sanctions today may be an important area of research tomorrow. ■

*Timothy Caulfield is an associate professor with the Faculties of Law and Medicine and Dentistry, and is also the research director of the U of A's Health Law Institute.*

## Stealth drug approved for ovarian cancer treatment

*Disguising itself as water, university-designed drug offers new hope*

By Phoebe Dey

A drug treatment developed at the University of Alberta to improve the quality of life for women with ovarian cancer has been approved for use in Canada.

"These women now have a chance of therapy that appears to be useful," said Dr. Terry Allen, a U of A pharmacology professor who developed the treatment. "Every year, 2,500 women in Canada are diagnosed with ovarian cancer and of that number 1,500 will die. Those are the women we are targeting, the ones who would die or are at the advanced stages of the disease."

Last month Health Canada approved Caelyx, the brand name for liposomal doxorubicin, for women who have failed standard first-line ovarian cancer therapy.

Allen's research, based on "Stealth" technology, uses a novel, targeted delivery

system to help evade recognition by the body's immune system. The Stealth liposomes disguise themselves as water, allowing the drug to circulate in the body for a longer period of time, increasing its chances of reaching the targeted tumour sites. As a result, the debilitating side effects associated with other chemotherapies are reduced, while the effectiveness of the drug is increased.

"Despite improvements in both response rates and survival with current combination chemotherapies, up to 30 per cent of patients fail to respond to first-line (conventional) therapy," said Allen. "In second-line therapy, the cure rate is low but our hope is to increase the quality of life and extend their survival time."

Clinical trials of 474 patients in Canada, the U.S. and Europe were admin-

istered and Caelyx demonstrated survival, toxicity and quality of life benefits for patients with advanced ovarian carcinoma. The treatment is administered intravenously once every four weeks.

Health Canada first approved Caelyx in 1998 for the treatment of AIDS-related Kaposi's sarcoma. Allen expects the therapy will be applied to more diseases in the future.

"We're hoping this is the second of many cancers that Caelyx will be approved for and it is certainly being tested in a wide variety of other solid tumours," she said. "We expect that other approvals will be forthcoming."

In Canada, Schering Canada Inc., based in Pointe-Claire, Que., markets Caelyx. The Stealth liposomal doxorubicin has been in use in the U.S. since 1995, under the brand name Doxil. ■



Dr. Terry Allen

Tina Chang



# Bagchee named first non-U.S. president of T.S. Eliot Society

English prof has been devoted admirer of great poet since reading his work in high school in India

By Gilbert A. Bouchard

Capping a three-decade-long passion for “the most influential poet of the 20<sup>th</sup> century,” Dr. Shyamal Bagchee now gets to serve as president of the T.S. Eliot Society.

The first non-U.S. citizen among the society’s dozen or so presidents, the University of Alberta professor of English and adjunct professor of comparative studies has served as the society’s vice-president for the past three years.

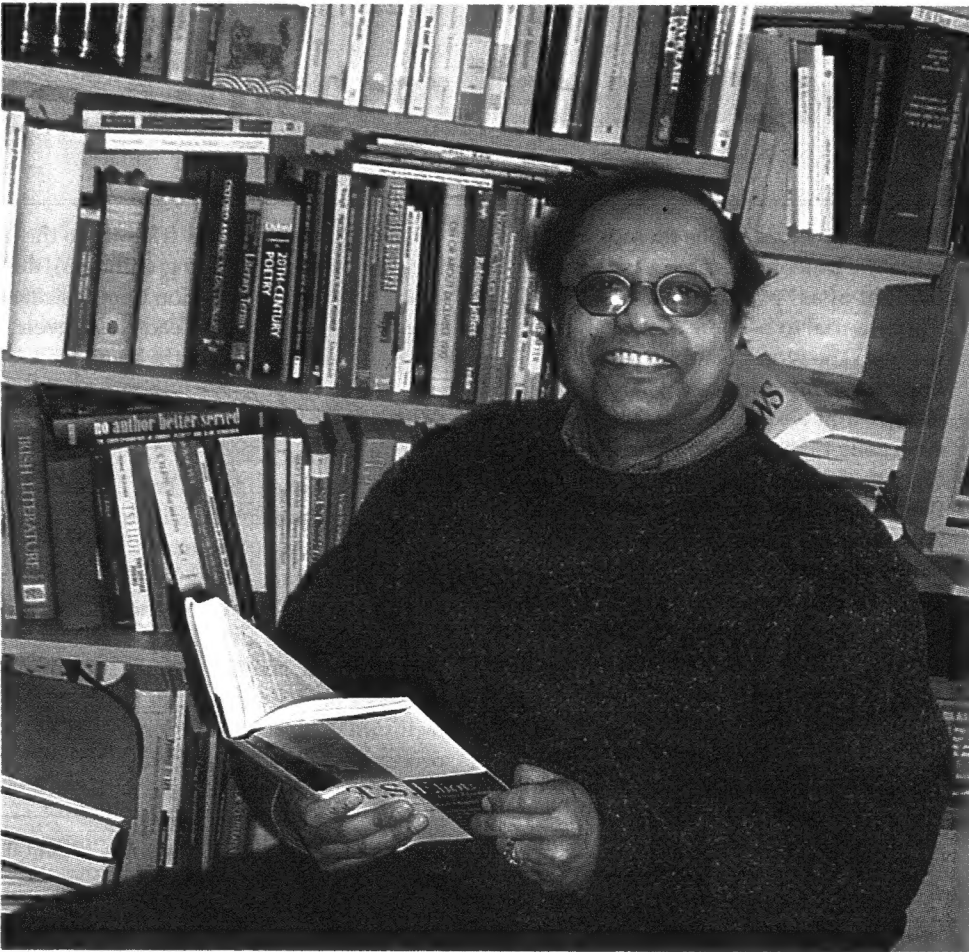
Thomas Stearns Eliot (1888-1965), best known for his groundbreaking poetry—“The Waste Land” (1922) and “Prufrock and Other Observations” (1917)—still commands great interest today among both literary scholars and lovers of verse, Bagchee said. Last year *Time Magazine* named the Nobel Prize winner the 20<sup>th</sup> century’s most influential poet.

“[Eliot’s] work remained most touching right up to the end—a wonderful irony given that he was also called the great poet of impersonality. His work reaches out to readers of all cultures and crosses all barriers.”

Bagchee’s presidential term promises to be a busy one given the society’s ever-ambitious agenda. On top of co-sponsoring academic sessions at the annual American Literary Association and Modern Languages Association gatherings, the society hosts a jam-packed, three-day celebration every year in St. Louis Missouri, Eliot’s hometown: “The celebration is al-

“His work reaches out to readers of all cultures and crosses all barriers.”

— Dr. Shyamal Bagchee



Dr. Shyamal Bagchee

ways held on the weekend closest to Eliot’s birthday on Sept. 26.”

This internationally attended gathering of the world’s major Eliot scholars includes activities ranging from more traditional academic sessions to concerts by the T.S. Eliot Jazz Society to a special sermon

delivered at the First Unitarian Church founded by Eliot’s grandfather to special “Eliot Aloud” readings. “We also have at least one event we host jointly with one of the local historical societies with whom we are cooperating to build a permanent Eliot memorial,” said Bagchee.



Photo of T.S. Eliot by Alfred Eisenstaedt, appeared in Life Magazine, 1951.

Bagchee, who’s been a devoted admirer of Eliot since he first read “The Waste Land” while in high school in India, said there is also be the possibility the society might actually host its annual September gathering outside of the United States, particularly in Great Britain, of which Eliot became a citizen in 1927.

“The annual celebration has always been held in St. Louis with the exception of 1999 when we held it in Gloucester, Massachusetts, where the Eliots had a summer home,” Bagchee explained. “I’d like to have a meeting in London, England in the next few years, given how important that city was to Eliot.” ■

## Killam professor’s research for the birds

Energetic researcher examines the complicated interplay between wild bird communities and human activity

By Gilbert A. Bouchard

For Dr. Susan Hannon, University of Alberta professor of biological sciences since 1993 and a winner of the 2000 Killam Annual Professorship, the well-being of Alberta’s avian population is a serious concern—in particular the complicated interplay between wild bird communities and human activity.

“Currently I’m looking at bird responses to fragmented habitats—basically looking at forests affected by human activity,” says the energetic researcher who suspects broken-up forest parcels might be leading to a decline in Alberta’s bird populations. (By fragmentation, Hannon is referring to when a forested piece of land is bisected by human deforestation—be it for the forestry, resource or agricultural sectors.)

Aspects of Hannon’s research include the impact of fragmentation on the number of predators as compared to continuous habitats (she suspects there is an increase) and the impact fragmentation has upon bird movements—something that may not occur to the average person. After all, birds do fly, so unlike a small landlocked creature you might think a break in the forest doesn’t pose much of a concern.

“(Forest) edges do deter movement,” she explains, noting various species of birds have different sensitivities to forest gaps. “We’re finding that some species, like

“We’re finding that some species, like woodpeckers, easily fly across gaps, while other species need to be lured across.”

—Hannon



Dr. Susan Hannon

woodpeckers, easily fly across gaps, while other species need to be lured across.”

One way of aiding bird movement is to leave narrow wooded “corridors” of standing trees between patches of forest isolated by farm or industrial uses. The wide application of Hannon’s work is reflected in the diversity of her funding: monies from traditional conservation groups to forestry companies to Alberta Sports and Recreation..

At the moment, Hannon’s research—conducted around the Athabasca area and focusing on the American Redstart, a small warbler—is assessing what “makes a good patch of forest,” studying various frag-

mented, continuous and corridorred patches, taking inventory of the birds and then trying to predict their populations in various types of forest. All this with a view to creating best land-use practices with the least impact on birds.

“Eventually there will be protected areas set aside after we know what the threshold levels are and how much forest cover is needed.”

Given there are virtually no “unimpacted forested areas”—even in the far north of the province—Hannon’s work is of significant importance.

Needless to say, population research takes patience. To avoid random back-

“Eventually there will be protected areas set aside after we know what the threshold levels are and how much forest cover is needed.”

—Hannon

ground variations, Hannon’s studies need to be of a long-term duration (aiming for six to eight years of data) which is no hardship for the ever-dedicated, outdoor-loving scientist. “I’ve always done long-term studies—the pay-off is that beautiful data set.”

It’s also no surprise to discover the good doctor is a great fan of outdoor recreational activities, enjoying the “spiritual renewal” offered by the wilderness and its natural species—a popular enough Alberta pastime and another reason for Hannon’s dedication to her much-needed work.

The popularity of outdoor activities and the appeal of the environmental aspects of the research certainly make it easy for Hannon to attract good graduate students. “Ecology has the most graduate students and very high interest in undergraduates,” she notes. “The applied aspects of the studies make it very attractive. Students want to be able to make a difference.”

The Killam Annual Professorships, established in July 1991, are awards based on scholarly activities such as teaching, research, publications, creative activities, presented papers, supervision of graduate students and courses taught, as well as service to the community beyond the university. ■



# Here's the Plan...

*In 2002, the University of Alberta implements campus-wide, multi-year strategic business planning*

*A man who does not think and plan long ahead  
will find trouble right at his door.*

—Confucius

## THE FOUR-YEAR STRATEGIC BUSINESS PLAN: WHAT IS IT?

It is a new planning process—based on a four-year cycle—which integrates all planning activities across the university.

Based on a common template, it is an effective tool for each faculty and unit to identify and meet its unique goals and objectives.

At the same time, it will help unite everyone behind the university's strategic business plan, its vision and mission, core activities and academic priorities.

## WHO IS BEHIND THE PLAN?

Acting with the support of the president and board, the initiative is sponsored by the Offices of the Vice President (Academic) & Provost, Doug Owram, and Acting Vice President (Finance and Administration), Al O'Brien.

The planning template was created by the Office of Resource Planning, in consultation with deans, chairs, directors and senior administration. Consultation has been ongoing for close to a year.

## HOW BIG A CHANGE IS THIS GOING TO BE?

It varies. All faculties and units currently do budgeting and forecasting. Typically, faculties create a one-year budget and three-year forecast. Four-year planning will build on existing planning and introduce more rigorous situational analysis and goal setting.

## WHY THIS KIND OF PLANNING?

Universities, governments and businesses of all kinds accept the value of strategic business planning.

At the University of Alberta, the new planning process will, simply put, make everyone more effective at realizing their mission and the mission and vision of the university.

Specifically, it will allow for better integration of planning activities across campus, will promote more strategic decision-making and resource allocation, and will be extremely valuable for advocacy and communication.

## WHAT IS ITS VALUE AS A COMMUNICATION TOOL?

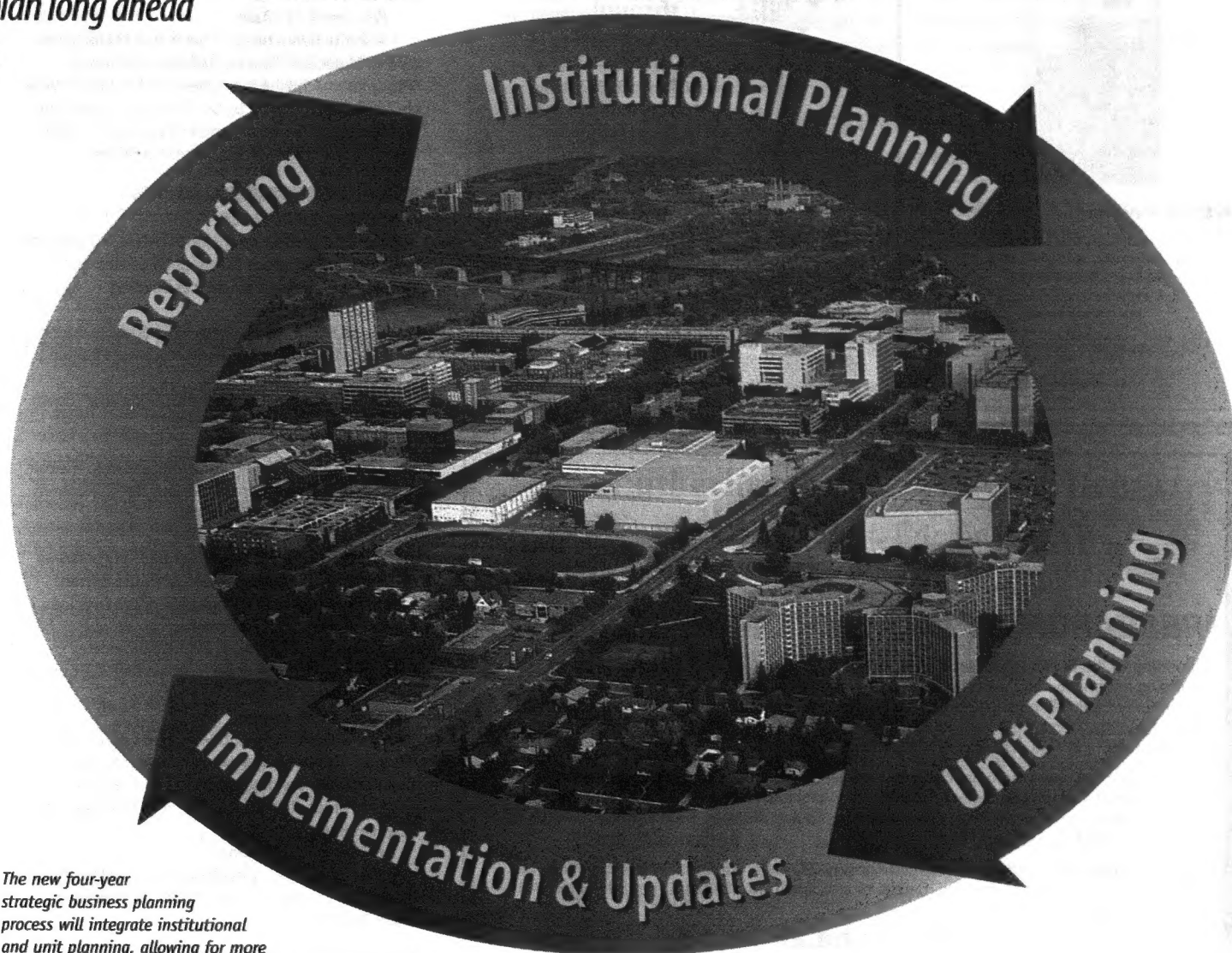
More than ever before, our constituents want to know where we're going, and they want us to show them we know how we're going to get there.

Governments and taxpayers want to see evidence of our vision and plans. Funding agencies want to know how effectively we can make use of their investments. Donors want to have confidence we have a valid use for their donations. Potential new faculty want to know where they might fit into a department's goals.

Good strategic planning promotes a shared understanding of values and goals. A good strategic plan is a living document that tells the story of the faculty, the unit and the university. It is a true story and it is one everyone can tell.

## WHO CAN POSSIBLY KNOW WHAT'S GOING TO BE HAPPENING IN FOUR YEARS?

Nobody. Governments change, economies falter, funding agencies withdraw funds, and faculty join and leave. But that's no reason not to set long-term goals.



*The new four-year strategic business planning process will integrate institutional and unit planning, allowing for more effective and uniform implementation, updating and reporting.*

In fact, a good plan can actually promote flexibility, and that's one of its greatest strengths. Sound plans help you stay focussed on realistic targets while providing the tools to cope with the unexpected.

## FLEXIBLE AND FIXED?

The four-year plan is a combination of a "fixed plan" and a "rolling plan." It is "fixed" in that every four years each faculty and unit will be required to create and submit its new plan. It is "rolling" in that each year the plan is revisited and, where necessary, revised.

To produce the plan each four years requires a serious and realistic evaluation of strengths, weaknesses and goals. The very creation of the plan will reveal things about your situation that demand your attention. You may be forced to confront your weaknesses, but that will be offset by the fact you will be able to measure and celebrate your successes.

## WHO IS AFFECTED?

At some level, all faculty and staff are affected.

The people responsible for authoring the actual documents are deans and senior administration and administrative staff. But a much wider membership including chairs, faculty and staff will participate in information gathering and goal setting.

When they are written effectively, strategic business plans assist every member of every unit by charting out a direction and showing where each individual can contribute.

## IT SOUNDS LIKE MORE WORK

Writing a four-year plan requires work. It requires thought, research and communication. The dividends, however, are great. You will see bumps in the road long before you reach them and will be able to anticipate and plan for them. You will have an invaluable tool to promote "buy-in" from within your unit,

from across campus and from the wider community.

Well-crafted plans make work easier and more meaningful for everyone.

## IS THERE HELP AVAILABLE?

There is help available to assist you with your plan. The planning template itself guides you through the steps. You will have access to research or be directed to research sources to help with your situational analysis. And you will have

help, if you want it, with goal setting and measurement methods.

## WHEN DO WE START?

Immediately! The first cycle of four-year strategic business planning will be approved for implementation April 1, 2002. Therefore, the planning process should begin immediately to ensure sufficient time for an environmental analysis, stakeholder input and the writing of the plan. ■



## FOUR-YEAR STRATEGIC BUSINESS PLAN EDUCATION SESSION

You are invited

Wednesday, February 28, 2001 or Thursday, March 6, 2001

Council Chambers (201D) University Hall

9:00 a.m. – 12:00 p.m.

Learn more about the new planning template now being introduced across campus.

Learn about:

- the planning process
- key elements of the plan
- planning terminology
- resources available to you to help with your strategic business plan.

This session is for you if:

you will be involved in some capacity in the planning process, or if you simply want to better understand the new four-year planning process, why this initiative is being undertaken, and how planning activities will be integrated throughout the university.

For more information and to RSVP please call:  
Marlene Lewis • Office of Resource Planning • 492-5629  
or email: marlene.lewis@ualberta.ca







# events

## EXHIBITION

### MCMULLEN GALLERY, U OF A HOSPITAL

February 3 to March 31, 2001  
Painters Dick Der, Robert von Eschen, Bernie Hippel, Julian Brezdan, and Ruby Mah create a visual feast for the eyes and soul in "Miscellaneous Connections." Gallery hours: Monday to Friday, 10 am to 8 pm, Saturday and Sunday, 1 to 8 pm. 8440 – 112 Street. For more information, contact Michelle Casavant or Susan Pointe. Phone 407-7152 or email: spointe@uah.ab.ca

## EXHIBITION

### UNIVERSITY EXTENSION CENTRE GALLERY

January 6 to February 15, 2001  
Annual show of students work. Gallery hours are from 8:30 am to 8:00 pm Monday to Thursday, 8:30 am to 4:30 pm Friday, and 9:00 am to 12:00 noon Saturday. Second floor, University Extension Centre, 8303 – 112 Street. Information: 492-3034.

## EXHIBIT

### DEPARTMENT OF HUMAN ECOLOGY & THE CLOTHING AND TEXTILE COLLECTION

February 1 to March 31, 2001  
Exhibit "Who Wears the Pants? Gender Roles and Clothing Communication." The exhibit explores how clothing, throughout the twentieth century, reflects changing gender roles in Canadian society. Public seminar Sunday, February 11, 1 pm to 4 pm in 3-05 Human Ecology Building. Exhibit hours: Monday to Friday, 7 am to 9 pm, Saturday, 8 am to 4 pm, Sunday, 12 pm to 4 pm. Human Ecology Building. For more information, please contact: Shawna Lemiski, (780) 492-2528.

## SATELLITE EVENT

### CENTRE FOR EXECUTIVE AND MANAGEMENT DEVELOPMENT

March 28, 8:50 am to 3:30 pm  
Dr. Ken Blanchard: "Creating High Five Teams." Dr. Ken Blanchard's latest strategies based on his new book "High Five!" can help you create team power, a sense of purpose, shared values, and goals. Save \$30 per ticket by buying your tickets for this live via satellite event by February 12. Visit [www.bus.ualberta.ca/cemd](http://www.bus.ualberta.ca/cemd) or call (780) 492-3860 for more information. Telus Centre Auditorium.

### STUDY ABROAD ODYSSEYS, PRESENTATION SERIES

### INTERNATIONAL CENTRE

February 9, 12:00 pm to 1:00 pm  
Listen to former U of A study abroad participants and find out how you can have the most exciting academic experience of your life! Presenters will be sharing useful information about courses overseas, costs of living, entertainment, travelling, etc. International Centre, Lobby, HUB Mall, sidewalk level, door #9101. For more information please contact Carmen Carvajal, 492-0089, or email: [carmen.carvajal@ualberta.ca](mailto:carmen.carvajal@ualberta.ca)

## PLAY

### JOHN DOSSETOR HEALTH ETHICS CENTRE

February 13 to February 16, 7:00 pm  
White Weddings: A Play. "White Weddings" is a touching and humorous dramatic presentation that offers an intimate exploration of family relationships in the face of a terminal illness. Tickets (\$10) are available at the door or to reserve tickets call 497-4407. Members of the John Dossetor Health Ethics Centre will lead a discussion of ethical issues raised in the performance. Place: 1-111R Clinical Sciences Building.

### ADVISORY REVIEW/SEARCH COMMITTEE FOR VICE-PRESIDENT (EXTERNAL AFFAIRS): FACULTY NOMINATIONS

On May 5, 2000, the Board of Governors approved a proposal to divide the current Vice-President (Research and External Affairs) portfolio in order to create two vice-presidencies: a Vice-President (Research) and a Vice-President (External Affairs). On July 1, 2000, Ms Susan Green was appointed Acting Vice-President (External Affairs) until June 30, 2001. The Board and the GFC Executive have agreed that there be a review of Acting Vice-President Susan Green before a decision is made concerning a search.  
The composition of the Advisory Review/Search Committee for Vice-President (External Affairs) includes two members of the full-time and continuing part-time faculty (Categories A1.1, A1.5 or their counterparts in A1.6) who do not hold administrative positions as defined in Section 22.3.2(4) of the GFC Policy Manual (eg Dean or Department Chair). Staff who are on leave are not eligible to serve. Nominees must also be agreeable to standing for election to the Advisory Review/Search Committee.  
Dr Fraser will chair the meetings of the Advisory Review/Search Committee which have al-

## AWARD PRESENTATION

### FACULTY OF LAW

February 27, 5:00 pm  
The Honourable Tevie H. Miller Teaching Excellence Award will be presented to Professor Wayne Renke by The Honourable EA Marshall, Court of Queen's Bench of Alberta. Faculty Lounge, 4th Floor Law Centre. Reception to follow. RSVP if attending to 492-5590, email: [deansec@law.ualberta.ca](mailto:deansec@law.ualberta.ca)

## OBSERVATORY

Campus Astronomical Observatory is open to the campus community and the general public every Thursday evening (except exam and holiday periods) beginning at 8 pm. Entrance to the Physics Building is via the northeast door or via the V-wing. For information call 492-5286.

## MUSIC

### BENEFIT CONCERT FOR INDIAN EARTHQUAKE VICTIMS

Feb. 26, 8 p.m. Convocation Hall  
The Department of Music's Centre for Musicology presents Uday Deshpande on tabla with Amelia Maciszewsky (sitar) and Dr. Regula Qureshi (sarangi), along with Deshpande's fusion group (featuring Terry McDade, Brat Miles, Brad Bowie and Bali Panesar). The performances will raise funds for earthquake victims in Gujrat, India. Admission is \$10 adults, \$5 for students and seniors. Further donations encouraged, tax receipts available.

### DEPARTMENT OF MUSIC

February 9, 8:00 pm  
Faculty and Friends. Duo Majoya. Marnie Giesbrecht, piano. Joachim Segger, piano.  
February 12, 8:00 pm  
Doctor of Music Recital, Gayle Martin, organ. Free admission.  
February 15, 8:00 pm  
Faculty Recital, Haley Simons, piano.  
February 17, 6:30 pm  
The University of Alberta Academy Strings Valentine's Ball, Faculty Club. Tickets \$45.00 per person. For ticket and more information, call Laura at 487-6875.  
February 26, 12:00 pm  
Noon-Hour Organ Recital. The recital presents a variety of organ repertoire played by students of the Department of Music. Free admission.  
February 26, 8:00 pm  
Master of Music Recital, Carolina Giesbrecht, violin. Free admission.  
Unless otherwise indicated: Admission \$5/student/senior, \$10/adult. Convocation Hall, Arts Building. To confirm concert information, please call 492-0601.

## CONFERENCE

### QUALITATIVE INSTITUTE, FACULTY OF NURSING

February 22 to 24, 8:30 am to 4:30 pm  
The Second International Interdisciplinary Conference, "Advances in Qualitative Methods." West Edmonton Mall. Early registration takes place February 21 from 5:00 pm to 9:00 pm. For more information, please call 492-9041.

## THEATRE

### STUDIO THEATRE

February 8-17, 8:00 pm  
The play "Molière x 3" at the Timms Centre for the Arts (87 Avenue and 112 Street). All evening performances are at 8 pm with a matinee on Thursday, February 15 at 12:30 pm. Tickets are available at the Timms Centre Box Office from 12 noon to 5 pm, Tuesday through Friday, or by calling 492-2495. "Molière x 3" is sponsored by the The Edmonton Journal, Gourmet Goodies and CHQT.

ready been scheduled on the following days: Friday, April 6, 2001, 2:00-4:30pm; Monday, May 14, 2001, 2:00-4:30pm; and, Tuesday, May 29, 2001, 10:00-Noon. Nominees should be able to attend these scheduled meetings, and there may be additional meetings.

Written nominations supported by the signatures of five members of the full-time and/or part-time academic staff (not including the nominee) should be submitted to the Director of the University Secretariat, Ellen Schoeck, 2-5 University Hall. Nominations must be received by Thursday, March 1, 2001, 1:00pm.

The composition of this fourteen-member Advisory Review/Search Committee for Vice-President (External Affairs), and the nomination and election procedures, are contained in section 102 of the GFC Policy Manual, which is available in the University Secretariat (2-5 University Hall) and on the WorldWideWeb located at [www.ualberta.ca/~unisec/](http://www.ualberta.ca/~unisec/).

If you have any questions about eligibility to serve or to nominate, please call Ellen Schoeck at local 5430.



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# positions

The records arising from this competition will be managed in accordance with provisions of the Alberta Freedom of Information and Protection of Privacy Act (FOIPPA).

The University of Alberta hires on the basis of merit. We are committed to the principle of equity of employment. We welcome diversity and encourage applications from all qualified women and men, including persons with disabilities, members of visible minorities, and Aboriginal persons.

## FACULTY OF NURSING DIRECTOR OF PLANNING, RESEARCH AND DEVELOPMENT

The Faculty of Nursing has an immediate opening for a director of planning, research and development. Reporting to the associate dean, Research, Partnerships and Faculty Development, the director is responsible for the coordination and support of research activities of faculty and students. Specific responsibilities include developing and implementing a research management plan in collaboration with the associate dean, identifying developmental needs, maintaining current information relating to research funding opportunities, and implementing a plan to support all aspects of the research process including research grant submissions, the conduct of research, and the dissemination of research outcomes.

Preferred candidates will hold a PhD in nursing, or a related discipline, and demonstrate knowledge of the academic research and funding process. Applicants will possess strong organizational and project management skills. Excellent written and oral communication, problem solving, decision-making and team building skills are also requirements of this position.

This is a full-time term position. Successful applicants will receive a competitive salary commensurate

with their experience and an excellent benefits plan.

Please forward your résumé by Feb. 17, 2001 to: Co-ordinator, Human Resources, Faculty of Nursing, 3-126A Clinical Sciences Building, University of Alberta, Edmonton, Alberta T6G 2G3. We thank all applicants, but advise that only those selected will be contacted for an interview.

## FACULTY OF PHYSICAL EDUCATION AND RECREATION FINANCE AND PLANNING OFFICER

Applications are being sought for a finance and planning officer for the Faculty of Physical Education and Recreation at the University of Alberta. Reporting directly to the dean of the faculty and as part of the faculty's senior management team, this position is responsible for co-ordination of budgeting and planning activities within the faculty, as well as the human resource management of administrative personnel. Serving as the chief financial officer of the faculty, the incumbent works in conjunction with the dean of physical education and recreation, associate deans and directors in order to set the budgets and create strategic plans for the faculty's units and centres. This process includes budgeting for all revenue generating activities. He/she acts for the dean within the units/centres in all matters pertaining to budget, ensuring the successful financial management of the faculty. This will include the identification and monitoring of key performance measures for administration and finance. The finance and planning officer plays an integral role in the human resource management of the administrative staff within the faculty, including bookkeeping personnel. The successful applicant will also be responsible for managing special projects.

Qualified applicants will have a post-secondary degree with preference given to those with a business

# ads

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RAVINE BUNGALOW – 1,700 sq ft. Finished walk-out basement. Three bedrooms, den, two fireplaces, balcony, five appliances. Non-smokers. Glenora, 12 minutes U of A. April 1, 2001. \$1,300. 489-5892.

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## ACCOMMODATIONS WANTED

WILL HOUSESIT AUGUST – DECEMBER 2001. Family with two school age children will housesit 5+ months. We're rebuilding our home. Dr. Graeme Clark, Adjunct Faculty, St. Stephen's College, 421-1747.

EXPERIENCED HOUSESITTERS – responsible warm Christian couple will provide live-in house-sitting, 6-24 months. No additional cost to you. Non-smokers, no pets. Available April 15. Excellent references. Bob & Lenora, 436-3042.

## GOODS FOR SALE

CASH PAID for quality books. The Edmonton Book Store, 433-1781.

## MISCELLANEOUS

CONCORDIA UNIVERSITY COLLEGE OF ALBERTA, EDUCATION. The Department of Education invites applications for a permanent-stream position at the

Assistant Professor level to begin August 1, 2001, subject to budgetary approval; salary commensurate with qualifications and experience. This position will combine teaching in the B.Ed. After Degree program in elementary education and administrative responsibilities at the level of Assistant Dean. Preference will be given to a generalist with a doctorate in education and a specialization in a curriculum area. The successful candidate will have at least five years of varied and successful classroom experience as well as experience in school administration. The successful candidate will have an interest in contributing to the guidance and expansion of a teacher education program in elementary school education, will be familiar with educational systems in Alberta, and be skilled in liaising with teachers, principals, and other stakeholders in education, and will have a demonstrated commitment to the education mission and values of Concordia as a Christian liberal arts university college. In accordance with Canadian immigration requirements, this advertisement is directed in the first instance to Canadian citizens and permanent residents. Applicants should submit a letter of application and their curriculum vitae and should arrange to have their official university transcripts and three letters of reference forwarded to: Dr. June McConaghy, Dean of Education, Concordia University College of Alberta, 7128 Ada Boulevard, Edmonton, Alberta, T5B 4E4. Tel: (780) 479-9278. Fax: (780) 474-1933. Email: [jmcconaghy@concordia.ab.ca](mailto:jmcconaghy@concordia.ab.ca). Applications will be accepted until March 6, 2001 or until the position is filled.

## SERVICES

TECH VERBATIM EDITING – APA, Chicago; medical terminology; on campus. Donna, 465-3753.

DAVID RICHARDS CARPENTRY. Certified journeyman, NAIT. Complete interior/exterior, residential, commercial renovations including plumbing/electrical. No job too big/small. References available. 436-6363.

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or accounting background, and an accounting designation (CMA, CGA, CA). Knowledge of People Soft Financials, Microsoft Suites, and University Policies and Procedures will be an asset. Preference will be given to individuals with five to seven years of experience in a related position who have a strong commitment to service. We are seeking an individual with strong interpersonal and organizational skills, and excellent written and oral communication abilities.

This is an administrative professional officer (APO) position with a salary range of \$41,858 - \$66,274.

Further information about the U of A and the faculty may be obtained from [www.ualberta.ca](http://www.ualberta.ca) and [www.per.ualberta.ca](http://www.per.ualberta.ca)

In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. If suitable Canadian citizens and permanent residents cannot be found, other individuals will be considered.

Applications for the above positions should be submitted by Feb. 16, 2001 to:

Dr. Michael J. Mahon, Dean  
Faculty of Physical Education and Recreation  
University of Alberta,  
Edmonton, AB T6G 2H9 Canada  
E-mail: [mike.mahon@ualberta.ca](mailto:mike.mahon@ualberta.ca)  
Telephone: (780) 492-3364 Fax: (780) 492-1008

## CENTRE FOR HEALTH PROMOTION STUDIES RESEARCH COORDINATOR

The Centre for Health Promotion Studies (CHPS) is seeking an innovative and self-directed individual as research coordinator for the centre. The centre is committed to interdisciplinary research and graduate education to advance knowledge, practice and policy in health promotion through community and

academic partnerships, and is formally linked to the Coordinating Council of Health Sciences.

The key responsibilities of the research coordinator are to assist the centre director, centre faculty and associates with the coordination of research-related activities including publications, presentations, research reports and symposia, preparation of grant proposals and contracts, and linkages with other provincial and national organizations involved in health promotion research and evaluation. Specific work tasks include organizing presentations, contributing to reports, planning research days, keeping records of associates, etc.

The successful candidate for the half-time position with the centre has strong organizational and administrative skills. The minimal level of academic preparation is at a master's level in health sciences, human ecology, psychology, etc. Familiarity with the academic environment and post-master's experience in research, background as research assistant, research project or program manager, and editorial skills are essential. Knowledge of relevant computer packages including MS Access, MS Excel, MS Word, Pro-Cite, MS PowerPoint, and experience in publication and presentation for academic and public venues are also an advantage. The salary will range up to \$25/hour depending on qualifications and experience.

Applicants should reply by Feb. 28, 2001, enclosing a curriculum vitae, the names of three (3) references and a letter indicating reasons for interest in the position to: Centre Coordinator, Centre for Health Promotion Studies, 5-10D University Extension Centre, 8303 - 112 Street, Edmonton, Alberta, T6G 2G3, Phone: (780) 492-4039, Fax: (780) 492-9579, Email: [health.promotion@ualberta.ca](mailto:health.promotion@ualberta.ca).

In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. If suitable Canadian citizens and permanent residents cannot be found, other individuals will be considered.

# notices

Please send notices attention Folio 400 Athabasca Hall, University of Alberta, T6G 2E8 or e-mail [public\\_affairs@ualberta.ca](mailto:public_affairs@ualberta.ca). Notices should be received by 3 p.m. one week prior to publication.

## ASSOCIATE VICE-PRESIDENT RESIGNS

Wanda Wetterberg, associate vice-president (human resource services) has resigned her position to pursue other interests. Fran Trehearne, associate vice-president, will now be responsible for Human Resource Services and academic administration. Discussions on the reorganization of human resources are underway and changes will be announced soon.

## AWA GRADUATE STUDENT AWARD

The Academic Women's Association invites applications from full- and part-time graduate students for its annual Graduate Student Award. This award, valued at \$500, will be made on the basis of scholarly achievement to a student enrolled at the University of Alberta in a graduate diploma, master's, or doctoral program. Preference will be given to those whose research, scholarship, and/or community involvement contribute to the advancement of women. Examples include advancing the role of women in academia or increasing information about and improving understanding of women's status, women's achievements, or the problems which women face.

Further information and application forms are available from the AWA Web site <[www.ualberta.ca/~uts/pages/AWAindex.htm](http://www.ualberta.ca/~uts/pages/AWAindex.htm)> or from AWA (c/o Bente Roed, 215 Central Academic Building. Phone: 492-2826).

Applicants should submit to the same office, by noon on March 1, the application form, description of research (limit: 400 words), statement of why you believe you should receive the award (limit: 250 words), official transcripts, and two letters of reference.

## RUTHERFORD AWARD

The GFC University Teaching Awards Committee (UTAC) is calling for nominations for the annual Rutherford Award for Excellence in Undergraduate Teaching.

The purpose of the Rutherford Award is to recognize excellent teaching, to publicize such excellence to the university and the wider community, to encourage the pursuit of excellence in teaching and to promote informed discussion of teaching and its improvement at the University of Alberta.

Nominations are made by faculties that teach undergraduate students, and information about the nomination procedures and adjudication criteria has been sent to those faculties. Nominations should be made through a faculty committee and submitted by the faculty to the secretary of UTAC, 2-5 University Hall. Anyone who needs assistance and advice in preparing nominations should contact Ms. Bente Roed, director, University Teaching Services, 215 Central Academic Building (492-2826). The deadline for receipt of award nominations is February 28, 2001 at 4 pm. In most cases, individual faculties have established earlier deadlines to allow for internal adjudication procedures.

At least one award, but not more than five, is given annually. Award recipients are publicly recognized at a special occasion, at convocation, and at the Celebration of Teaching and Learning. They also receive a memento and a cash prize of \$2,500. The prize is awarded to the recipients as a cheque or placed in a trust account for professional development purposes.

## UNIVERSITY CUP CALL FOR NOMINATIONS

The Office of the Vice-President (Academic) and Provost is pleased to invite nominations for the University Cup 2001 competition. The University Cup is among the highest honours that the University of Alberta confers on its faculty members. It is awarded in recognition of faculty members who have clearly excelled in both teaching and research. These two activities are the primary responsibilities of faculty as set out in the Staff Agreement, and together they represent the heart of the University ideal, which is the creation and transmission of knowledge.

Any full-time member of the academic teaching staff with 20 years of service as a faculty member in a university community and at least 10 years of service as a faculty member at the

University of Alberta is eligible to receive the award.

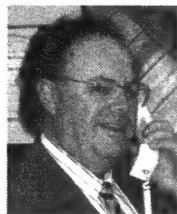
Formal nominations, including supporting documents, may be submitted by current or past students, faculty members, Deans or Chairs to Doug Owrarn, Vice President (Academic) and Provost, 2-10 University Hall, by March 1, 2001.

Nominators play a crucial role in ensuring that the candidates considered are the most accomplished members of the University and that the letters of support give appropriate testimony to nominees' achievements.

Detailed criteria for nominations may be obtained from the Office of Vice President (Academic) and Provost: 2-10 University Hall or call 492-3290.

The records arising from this competition will be managed in accordance with provisions of the Alberta Freedom of Information and Protection of Privacy Act (FOIPPA).

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Please join us for light refreshments, take a few moments to meet with our publishers' & vendors' representatives and discover how our industry is working to improve the Academic Resources available to Post-Secondary Education Institutions.

### MARK YOUR CALENDARS

February 2001

Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	1	2	3
4	5	6	7	8	9	10

- Interactive presentations, new technology based ancillary and student support materials
- New & soon to be released academic and professional resource publications
- New computer technology demonstrations, hardware & software
- Engineering & Writing Instruments

Tuesday, February 20 &  
Wednesday, February 21  
11 am.- 3 pm.  
SUB Bookstore, lower level

## TEACHING UNIT AWARD CALL FOR NOMINATIONS

The Office of the Vice-President (Academic) and Provost is pleased to invite nominations for the Teaching Unit Award. The intent of this award is to celebrate excellence in teaching when a group of individuals consistently work together to promote outstanding teaching and learning.

This award is to be given to a "teaching unit." The teaching unit must have been in existence for at least three years. The teaching unit may work at the graduate or undergraduate level and may include some or all members of a faculty, school, department or division, or it may be an interdisciplinary team. Students taught by such a teaching unit must be able to identify that

they were taught by teachers that collaborate as a team and not a series of individuals. The teachers in the teaching unit must be able to define how they are a unit, describe their roles and how they function.

Formal nominations, including supporting documents, may be submitted by Deans, Chairs, and any staff member or student to Dr. Doug Owrarn, Vice President (Academic) and Provost, 2-10 University Hall, by March 1, 2001

Nominations are limited to 15 pages. Detailed criteria for nominations may be obtained from the Office of Vice President (Academic) and Provost — 492-3290.

The records arising from this competition will be managed in accordance with provisions of the Alberta Freedom of Information and Protection of Privacy Act (FOIPPA).





# BRIDGING A PHOTOGRAPHIC HISTORY

**Anthropologist uses the past to help plan the future of a national park**

By Phoebe Dey



To most people, it looked like an ordinary box filled with old, fading photos. But to Jeanine Rhemtulla, then a graduate student in the Department of Renewable Resources, it was a treasure trove of history.

While doing research on vegetation change in Jasper, Rhemtulla had discovered a collection of survey photographs taken in 1915 by Morrison Parsons Bridgland, a surveyor with Dominion Lands Survey who used them to construct the first topographic maps of Jasper National Park (JNP).

After realizing the richness of her find, Rhemtulla turned to Dr. Eric Higgs, an anthropology professor who was already involved in a project looking at advancing a restorative model of park management for the rapidly developing JNP. "By the end of the summer we were aware we had made a pretty big discovery," said Higgs.

In 1915, in the space of four months, Bridgland and his survey crew of five—an assistant, two horse packers, two cooks—and a team of pack horses, set up 93 survey stations on mountain tops, cliff edges and prominent points at ground level. At each station, Bridgland and his assistant composed a panorama by taking a set of photos circling the horizon. Later that fall, he meticulously crafted these 735 photographs, along with pages of theodolite measurements, into a topographic map covering 2,300 sq. metres, almost one-quarter of JNP's area.

"By the end of the summer we were aware we had made a pretty big discovery."

— Dr. Eric Higgs.



Dr. Eric Higgs taking a break from field work in Jasper National Park.

In 1996 and 1997 Higgs and his team went back to Jasper to conduct preliminary fieldwork. Then, starting in the summer of 1998, armed with a large-format camera, Rhemtulla and Higgs returned to the exact survey stations and repeated Bridgland's feat. Higgs and his colleagues have since put together a monumental

database of the images, creating a comprehensive illustration of what the landscape was like in 1915.

"All sorts of things have been going on in that valley—it has been extensively peopled and has changed significantly because of ecological processes—and to plan for the future you have to look at the past," said Higgs, who recently secured a Social Sciences and Humanities Research Council grant and funds from Foothills Model Forest to analyse the Bridgland database. "The photos will be able to tell us what has changed, the type and amount of human activity and vegetation use. The possibilities of what we can learn are almost limitless."

Unknowningly, the Dominion Lands Survey created a legacy outliving both its creator and the practicality of the first map. The Bridgland collection is unparalleled by any other early historical records in the area, and by few records series in the Rocky Mountain Region as a whole, said Higgs.

After a preliminary comparison of the two sets of pictures, Higgs found that much more has changed in 80 years than he expected. The most obvious transformation is the difference in vegetation cover, he said.

"Grasslands and scrubby forests have been replaced by forest cover. Before the 20<sup>th</sup> century, vegetation was maintained by fire and allowed to regenerate. In the past 100 years fire maintenance hasn't been used and closed canopy coniferous forests have become more prevalent. And of course the direct human influence has brought us roadway construction, pathways and accommodation that weren't there before."

Higgs and his colleagues are now working with Computing and Network Services and a MACI consortium (a campus-wide group of researchers working on computationally-intensive

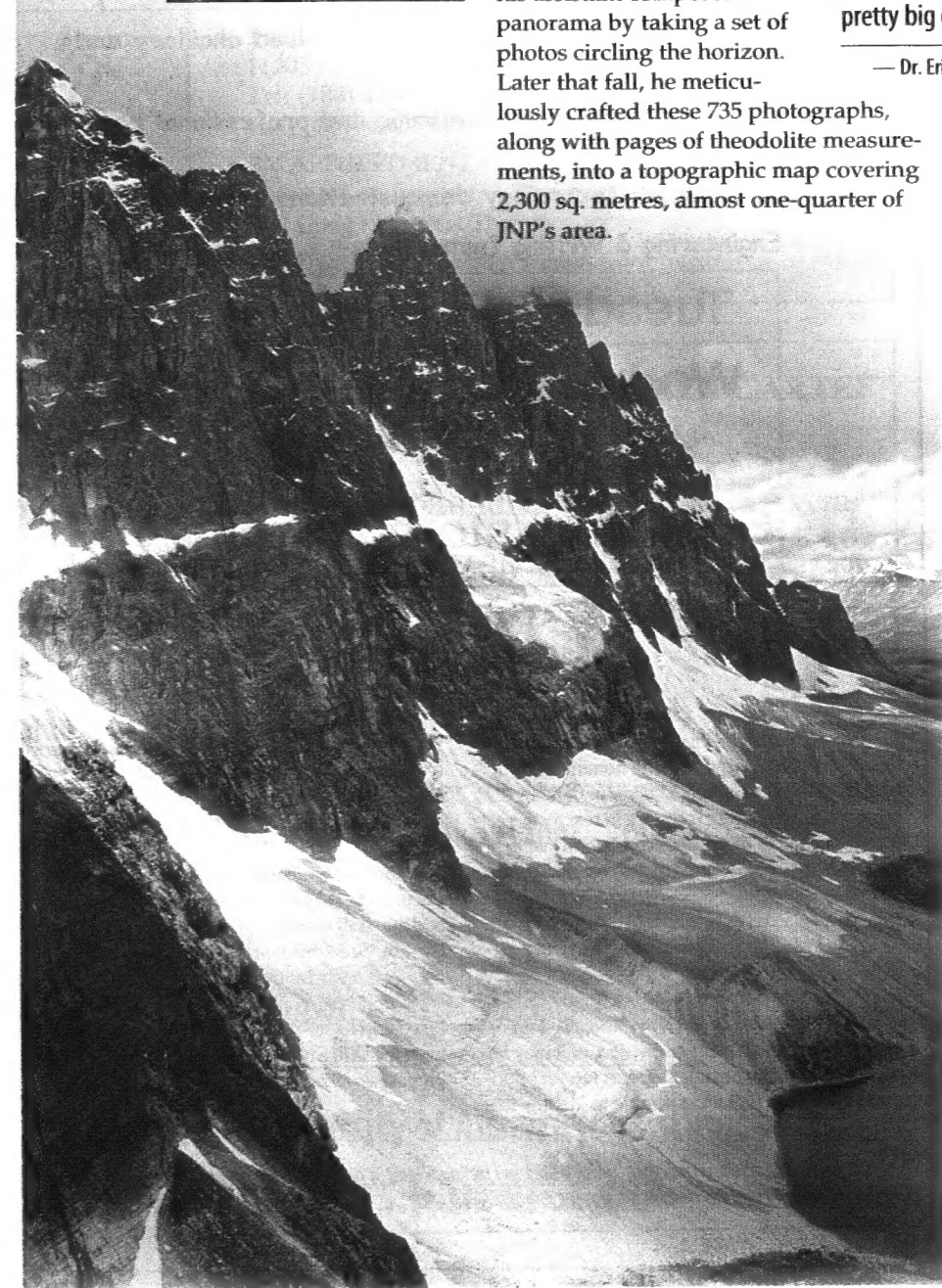
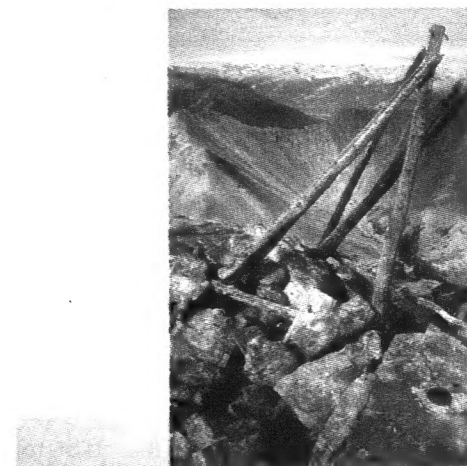
programs) to put the finishing touches on the image database, which will soon be available on the Web.

"Now that we're getting this database completed, we'll be able to start tackling the photos and analysing them in detail," he said, adding the project could last as long as 10 years. As a consequence of their archival research, Higgs' team has uncovered several more collections of survey photographs beckoning them to the field for further work.

"We're not quite as fast as Bridgland was. He was a pretty tough guy—he took all the photos in one season. We did it in two. But now our work really begins." ■

"All sorts of things have been going on in that valley—it has been extensively peopled and has changed significantly because of ecological processes."

— Dr. Eric Higgs



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